Clinical Cancer Research
Table of Contents

May 15, 2014 • Volume 20 • Number 10

Highlights of This Issue 2503

SPECIAL FEATURES

2505 Minimal Residual Disease in Breast Cancer: In Blood Veritas
Giulia Siravegna and Alberto Bardelli
See related article, p. 2643

Molecular Pathways

2508 Molecular Pathways: Preclinical Models and Clinical Trials with Metformin in Breast Cancer
Alastair M. Thompson

2516 Molecular Pathways: Adaptive Kinome Reprogramming in Response to Targeted Inhibition of the BRAF–MEK–ERK Pathway in Cancer
Gary L. Johnson, Timothy J. Stuhlmiller, Steven P. Angus, Jon S. Zawistowski, and Lee M. Graves

CCR Focus

2524 The Language of Pharmacodynamics
Susan E. Bates

2525 Pharmacologic Biomarkers in the Development of Stratified Cancer Medicine
William Douglas Figg and David R. Newell

2530 Using Pharmacogene Polymorphism Panels to Detect Germline Pharmacodynamic Markers in Oncology
Daniel L. Hertz and Howard L. McLeod

2541 Genome-Wide Association Study: A Useful Tool to Identify Common Genetic Variants Associated with Drug Toxicity and Efficacy in Cancer Pharmacogenomics
Siew-Kee Low, Atsushi Takahashi, Taisei Mushiroda, and Michiaki Kubo

2553 Circulating Tumor Cells: A Multifunctional Biomarker
Timothy A. Yap, David Lorente, Aurelius Omlin, David Olmos, and Johann S. de Bono

HUMAN CANCER BIOLOGY

2595 FOXM1 Promotes the Warburg Effect and Pancreatic Cancer Progression via Transactivation of LDHA Expression
Jiujie Cui, Min Shi, Dacheng Xie, Daoyan Wei, Zhiliang Jia, Shaojiang Zheng, Yong Gao, Suyun Huang, and Keping Xie

2607 Human Melanoma Metastases Demonstrate Nonstochastic Site-Specific Antigen Heterogeneity That Correlates with T-cell Infiltration
Edmund K. Bartlett, Patricia A. Fetsch, Armando C. Filie, Andrea Abati, Seth M. Steinberg, John R. Wunderlich, Donald E. White, Daniel J. Stephens, Francesco M. Marincola, Steven A. Rosenberg, and Udaí S. Kammula

2617 miR-141 Is a Key Regulator of Renal Cell Carcinoma Proliferation and Metastasis by Controlling EphA2 Expression
Xuan Yu Chen, Xuegang Wang, Anming Ruan, Weiwei Han, Yan Zhao, Xing Lu, Pei Xiao, Hangchuan Shi, Rong Wang, Li Chen, Shaoyong Chen, Quansheng Du, Hongmei Yang, and Xiaoping Zhang

2631 Regulation of Colorectal Carcinoma Stemness, Growth, and Metastasis by an miR-200c-Sox2-Negative Feedback Loop Mechanism
Yan-Xia Lu, Li Yuan, Xiao-Lei Xue, Min Zhou, Yan Liu, Chao Zhang, Jing-Ping Li, Lin Zheng, Min Hong, and Xue-Nong Li
Detection of Cancer DNA in Plasma of Patients with Early-Stage Breast Cancer
See related article, p. 2505

Id1-Induced IGF-II and Its Autocrine/Endocrine Promotion of Esophageal Cancer Progression and Chemoresistance—Implications for IGF-II and IGF-IR–Targeted Therapy
Bin Li, Sai Wah Tsao, Kwok Wah Chan, Dale L. Ludwig, Ruslan Nosovskydlyy, Yuk Yin Li, Qing Yu He, and Annie L.M. Cheung

COX-2–Independent Effects of Celecoxib Sensitize Lymphoma B Cells to TRAIL-Mediated Apoptosis
Anne-Sophie Gallouet, Marion Travers, Laurence Bresson-Bepoldin, Fabien Guilloton, Céline Pangault, Sylvie Caulot-Maugendre, Thierry Lamy, Karin Tarte, and Thierry Guillaudeux

Selective JAK2 Inhibition Specifically Decreases Hodgkin Lymphoma and Mediastinal Large B-cell Lymphoma Growth In Vitro and In Vivo
Yansheng Hao, Björn Chapuy, Stefano Monti, Heather H. Sun, Scott J. Rodig, and Margaret A. Shipp

Recognition and Killing of Autologous, Primary Glioblastoma Tumor Cells by Human Cytomegalovirus pp65-Specific Cytotoxic T Cells
Smita K. Nair, Gabriel De Leon, David Boczkowski, Robert Schmitting, Weihua Xie, Janet Staats, Rebecca Liu, Laura A. Johnson, Kent Weinhold, Gary E. Archer, John H. Sampson, and Duane A. Mitchell

Anti-VEGF Antibodies Mitigate the Development of Radiation Necrosis in Mouse Brain

ABCB1, ABCG2, and PTEN Determine the Response of Glioblastoma to Temozolomide and ABT-888 Therapy
Fan Lin, Mark C. de Gooijer, Eloy Moreno Roig, Levi C.M. Bull, Susan M. Christner, Jan H. Beumer, Thomas Würdinger, Jos H. Beijnen, and Olaf van Tellingen

Metformin Sensitizes EGFR-TKI–Resistant Human Lung Cancer Cells In Vitro and In Vivo through Inhibition of IL-6 Signaling and EMT Reversal
Li Li, Rui Han, Hualiang Xiao, Caityu Lin, Yubo Wang, Hao Liu, Kunlin Li, Hengyi Chen, Fenfen Sun, Zhenzhou Yang, Jianxin Jiang, and Yong He

Profound Prevention of Experimental Brain Metastases of Breast Cancer by Temozolomide in an MGMT-Dependent Manner
Diane Palmieri, Renata Duchnowska, Stephan Woditschka, Emily Hua, Yongzhen Qian, Wojciech Biernat, Katarzyna Soniska-Mielcarek, Brunilde Grill, Andreas M. Stark, Stephen M. Hewitt, David J. Liewehr, Seth M. Steinberg, Jaoek Jassem, and Patricia S. Steeg

Biologic Effects of Platelet-Derived Growth Factor Receptor α Blockade in Uterine Cancer
Ju-Won Roh, Jie Huang, Wei Hu, XiaoYun Yang, Nicholas B. Jennings, Vasudha Sehgal, Bo Hwa Sohn, Hee Dong Han, Sun Joo Lee, Duangmani Thanapprapasr, Justin Bottsford-Miller, Behrouz Zand, Heather J. Dalton, Rebecca A. Previs, Ashley N. Davis, Koji Matsuo, Ju-Seog Lee, Pralhad Ram, Robert L. Coleman, and Anil K. Sood
A Signature Predicting Poor Prognosis in Gastric and Ovarian Cancer Represents a Coordinated Macrophage and Stromal Response
Rita A. Busuttil, Joshy George, Richard W. Tothill, Kylie Ioculano, Adam Kowalczyk, Catherine Mitchell, Stephen Lade, Patrick Tan, Izhak Haviv, and Alex Boussioutas

In Situ Tumor PD-L1 mRNA Expression Is Associated with Increased TILs and Better Outcome in Breast Carcinomas
Kurt A. Schalper, Vamsidhar Velcheti, Daniel Carvajal, Hallie Wimberly, Jason Brown, Lajos Pusztai, and David L. Rimm

Population Pharmacokinetics of Bevacizumab in Children with Osteosarcoma: Implications for Dosing

Quantitative Measurements of Tumoral p95HER2 Protein Expression in Metastatic Breast Cancer Patients Treated with Trastuzumab: Independent Validation of the p95HER2 Clinical Cutoff
Renata Duchnowska, Jeff Sperinde, Ahmed Chenna, Mojgan Haddad, Agnes Paquet, Yolanda Lie, Jodi M. Weidler, Weidong Huang, John Winslow, Tomasz Jankowski, Bogumila Czartoryska-Arulkowicz, Piotr J. Wysocki, Malgorzata Foszczyńska-Kłoda, Barbara Radecka, Maria M. Litwiniuk, Jolanta Żok, Michał Wiśniewski, Dorota Zuziak, Wojciech Biernat, and Jacek Jassem

AC icon indicates Author Choice
CME icon indicates that this article is available for continuing medical education credit at http://cme.aacrjournals.org
For more information please visit www.aacrjournals.org

ABOUT THE COVER
The cover shows a brain section from a mouse injected with a brain seeking variant of the human breast cancer cell line MDA-MB-231. Immunohistochemical staining indicates a lack of MGMT expression in the tumor cells. Tissue was stained with anti-MGMT antibody and counterstained with hematoxylin and eosin. For details, see the article by Palmieri and colleagues on page 2727 of this issue.